

Title (en)

SPEED REDUCER

Title (de)

DREHZAHLMINDERER

Title (fr)

RÉDUCTEUR DE VITESSE

Publication

**EP 3763968 A1 20210113 (EN)**

Application

**EP 20183443 A 20200701**

Priority

JP 2019127614 A 20190709

Abstract (en)

A speed reducer (1) according to one embodiment of the invention includes a carrier (24) having a recess (50) therein, a crankshaft (12) disposed in the recess (50), and a stopper (60) that is disposed on a bottom surface (51) of the recess and prevents the crankshaft (12) from moving in a direction along a rotation shaft (A2) of the crankshaft (12) toward the bottom surface (50).

IPC 8 full level

**F16H 1/28** (2006.01)

CPC (source: CN EP KR US)

**F16C 3/06** (2013.01 - CN); **F16H 1/2863** (2013.01 - EP); **F16H 1/32** (2013.01 - CN EP KR US); **F16H 57/023** (2013.01 - CN);  
**F16H 57/08** (2013.01 - CN); **F16H 2001/323** (2013.01 - CN EP KR US); **F16H 2001/326** (2013.01 - KR)

Citation (applicant)

- JP H05180278 A 19930720 - SUMITOMO HEAVY INDUSTRIES
- JP 2016130536 A 20160721 - NABTESCO CORP

Citation (search report)

- [XDI] JP 2016130536 A 20160721 - NABTESCO CORP
- [XAI] DE 102011109191 A1 20120209 - SUMITOMO HEAVY INDUSTRIES [JP]
- [I] JP 2014119101 A 20140630 - NABTESCO CORP

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3763968 A1 20210113; EP 3763968 B1 20240228; CN 112211959 A 20210112; JP 2021011936 A 20210204; JP 7301641 B2 20230703;**  
KR 20210006863 A 20210119; TW 202104774 A 20210201; US 11187300 B2 20211130; US 2021010564 A1 20210114

DOCDB simple family (application)

**EP 20183443 A 20200701; CN 202010652441 A 20200708; JP 2019127614 A 20190709; KR 20200083870 A 20200708;**  
TW 109119266 A 20200609; US 202016918834 A 20200701